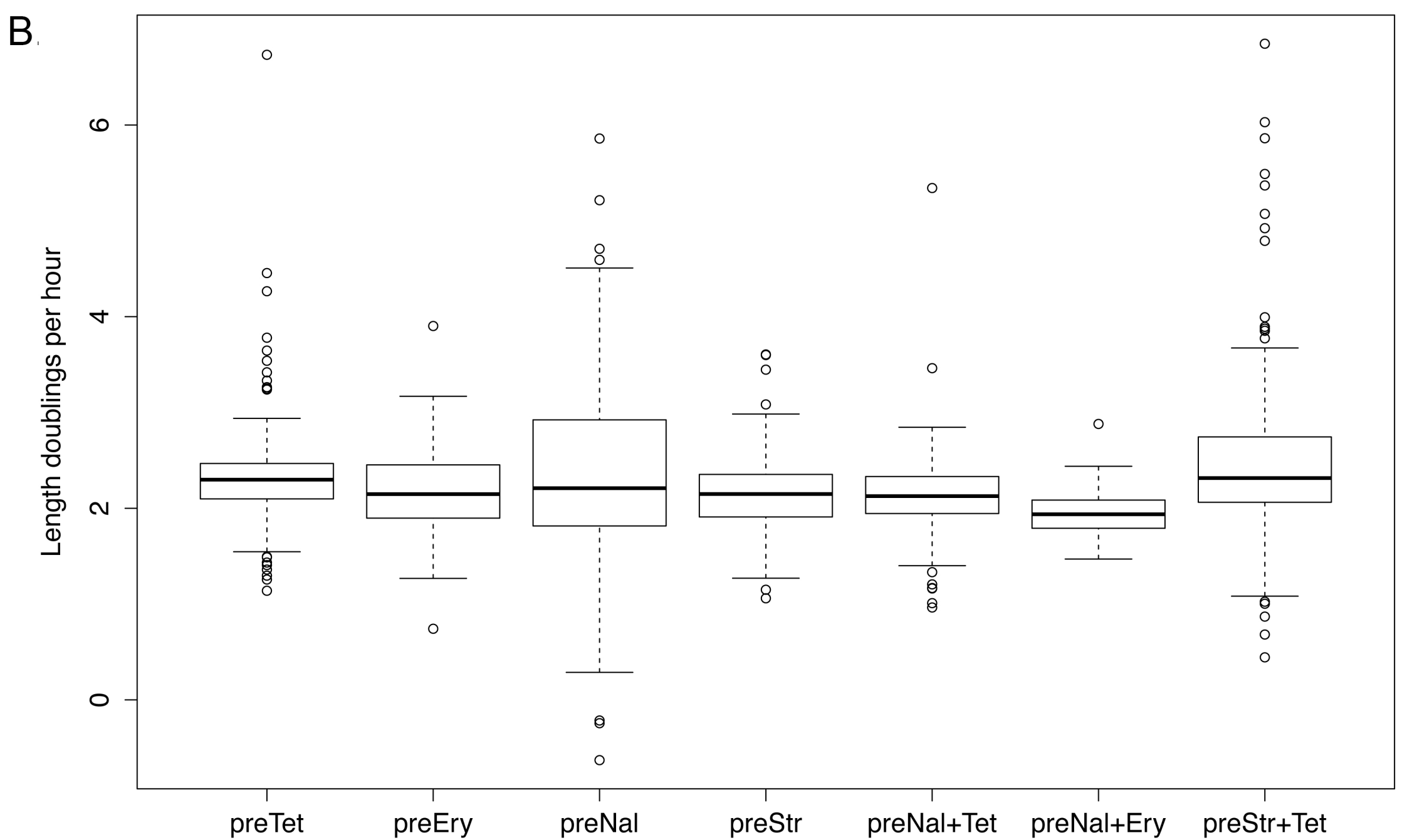
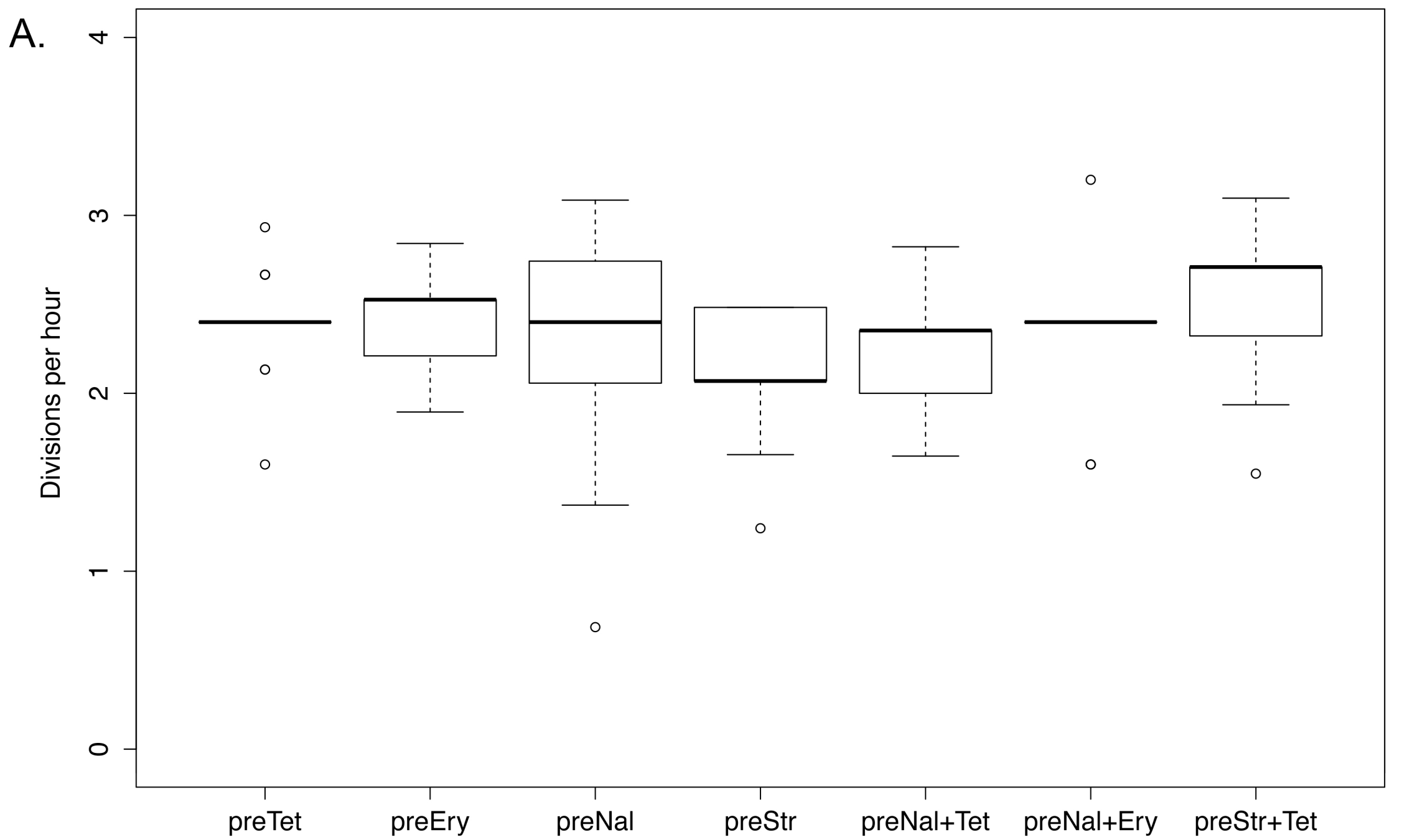


**Figure S1. Length-time graphs of individual cells exposed to streptomycin, and streptomycin + tetracycline.**

All cells exposed to streptomycin were observed to die during treatment. In contrast, a significant number of cells exposed to both streptomycin and tetracycline survived antibiotic exposure



**Figure S2. The distributions of division rates (A) and elongation rates (B) of cells in plain LB broth prior to each antibiotic condition.**

One-way ANOVAs revealed no significant differences between groups in terms of division rates ( $F_{6,145} = 1.5774$ ,  $p = 0.4142$ ) or elongation rates ( $F_{6,912} = 1.9058$ ,  $p = 0.077$ ).

Table S1. Post-antibiotic treatment individual survival rates		
Drug condition	Individuals observed over entire experiment	% survival
NAL	291	0
STR	318	0
TET	287	87.8
NAL + TET	368	83.9
NAL + ERY	423	30.9
STR + TET	361	38.5

\*Comparable single cell survival rates in erythromycin are unobtainable due to the filamentation induced by the drug. A majority of filamentous individuals are pulled by the flow of media leaving only a few cells remaining in a growth channel for the entire duration of the experiment.